AMENDMENTS TO THE CLAIMS:

Claims 1 and 10 are independent, and claims 1, 5, 10, 11, and 14 are currently being amended.

Listing of Claims:

1. (Currently amended) A mismatch modeling tool comprising:

a software implemented transistor mismatch model ("SITMM");

at least one editable mismatch model data library comprising process parameter variables accessed by said [software implemented transistor mismatch model] SITMM;

a circuit simulation library and program data output accessed by said [software implemented transistor mismatch model] SITMM; and

a graphical interface to said [software implemented transistor mismatch model] SITMM, the graphical interface having at least one of: (a) a plurality of string-of-data input parameter fields to provide a plurality of input parameter data strings to the SITMM for generating results for at least one mismatch parameter over the plurality of input parameter data strings, and (b) a plurality of range-of-data input parameter fields to provide a plurality of input parameter ranges of data to the SITMM for generating results for at least one mismatch parameter over the plurality of input parameter ranges of data.

2. (Original) The mismatch modeling tool of Claim 1 wherein said graphical interface comprises a menu driven modeled device selection frame.

3. (Original) The mismatch modeling tool of Claim 2 wherein said menu driven modeled

3

device selection frame configures said software implemented transistor mismatch model to display a dynamically generated input data frame within said graphical interface.

4. (Original) The mismatch modeling tool of Claim 3 wherein said dynamically generated input data frame reflects data input fields of one of a plurality of input scenarios comprising at least one of:

a voltage driven scenario;

a current driven scenario;

a differential pair scenario;

a resistor scenario; and

a capacitor scenario.

5. (Currently Amended) The mismatch modeling tool of Claim 4 wherein said dynamically generated input data frame comprises a plurality of data input columns comprised of at least [one] two of:

a plurality of single-data input parameter fields;

a plurality of string-of-data input parameter fields; and

a plurality of range-of-data input parameter fields.

6. (Original) The mismatch modeling tool of Claim 5 further comprising an electronically transmitted ASCII output data file, said ASCII output data file comprising output data reflecting at least one of:

said plurality of single-data input parameter fields;

said plurality of string-of-data input parameter fields; and

4

said plurality of range-of-data input parameter fields.

7. (Original) The mismatch modeling tool of Claim 6 wherein said ASCII output data file is an emailed ASCII output data file.

8. (Original) The mismatch modeling tool of Claim 6 further comprising a three dimensional output plot, said three dimensional output plot being a graphical representation of said output data within said ASCII output data file.

9. (Original) The mismatch modeling tool of Claim 5 further comprising a dynamically generated output data frame, said dynamically generated output data frame displaying output data reflecting said plurality of single-data input parameter fields.

10. (Currently amended) A mismatch modeling tool comprising:

a software implemented transistor mismatch model ("SITMM");

at least one editable mismatch model data library comprising process parameter variables accessed by said [software implemented transistor mismatch model] ("SITMM"); [and]

a circuit simulation library and program data output accessed by said [software implemented transistor mismatch model] ("SITMM"); and

a graphical interface to said SITMM, the graphical interface having at least one field for receiving sets of data for a plurality of mismatch input parameters and providing the sets of data to the SITMM to generate mismatch output data based on the sets of mismatch input data.

11. (Currently amended) The mismatch modeling tool of Claim 10 [further comprising a graphical interface to said software implemented transistor mismatch model] , wherein the mismatch input parameters include at least one bias parameter, at least one geometry parameter,

5

and at least one temperature parameter.

12. (Original) The mismatch modeling tool of Claim 11 wherein said software implemented transistor mismatch model is configurable for a plurality of input scenarios comprising at least one of:

a voltage driven scenario;

a current driven scenario;

a differential pair scenario;

a resistor scenario; and

a capacitor scenario.

13. (Original) The mismatch modeling tool of Claim 12 wherein said graphical interface comprises a dynamically generated input data frame, said dynamically generated input data frame displaying parameters reflecting a selected said input scenario.

14. (Currently amended) The mismatch modeling tool of Claim 13 wherein said dynamically generated input data frame comprises a plurality of data input columns comprised of at least [one] two of:

a plurality of single-data input parameter fields;

a plurality of string-of-data input parameter fields; and

a plurality of range-of-data input parameter fields.

15. (Original) The mismatch modeling tool of Claim 14 further comprising a dynamically generated output data frame, said dynamically generated output data frame displaying output data reflecting said plurality of single-data input parameter fields.

6

16. (Original) The mismatch modeling tool of Claim 14 further comprising an electronically transmitted ASCII output data file, said ASCII output data file comprising output data reflecting at least one of:

said plurality of single-data input parameter fields;

said plurality of string-of-data input parameter fields; and

said plurality of range-of-data input parameter fields.

17. (Original) The mismatch modeling tool of Claim 16 further comprising a three dimensional output plot, said three dimensional output plot being a graphical representation of said output data within said ASCII output data file.

18. (Original) The mismatch modeling tool of Claim 13 wherein said dynamically generated input data frame comprises a plurality of data input columns comprised of at least one of:

a plurality of string-of-data input parameter fields; and

a plurality of range-of-data input parameter fields.

19. (Original) The mismatch modeling tool of Claim 18 further comprising an ASCII output data file, said ASCII output data file comprising output data reflecting at least one of:

said plurality of string-of-data input parameter fields; and

said plurality of range-of-data input parameter fields.

20. (Original) The mismatch modeling tool of Claim 19 further comprising a three dimensional output plot, said three dimensional output plot being a graphical representation of said output data within said ASCII output data file.

7